Abstract

A warm-up system is provided for an internal combustion engine (1) equipped with a CO₂ absorbing and releasing agent (15) that absorbs CO₂ at a temperature in a first temperature range and releases the CO₂ at a temperature in a second temperature range that is higher than the first temperature range. The warm-up system increases a temperature of the CO₂ absorbing and releasing agent (15) to reach the second temperature range such that the CO₂ released from the CO₂ absorbing and releasing agent (15) is supplied to a component of the internal combustion engine (1) such as an intake manifold (3a) and an exhaust gas purification catalyst (10).